APPARATUS FOR CONVERTING HYDROCARBON FUEL INTO HYDROGEN GAS AND CARBON DIOXIDE

Abstract of Disclosure

A reformer is disclosed for converting a hydrocarbon fuel into hydrogen gas and carbon dioxide, the reformer having a first tube, a second tube annularly disposed about the first tube, and a third tube annularly disposed about the second tube. The first tube includes a first catalyst, a first tube outlet, and is adapted for receiving a first mixture of steam. The second tube is adapted for receiving a second mixture of an oxygen-containing gas and a second fuel. The third tube is adapted for receiving a first reaction reformate from the first tube and a second reaction reformate from the second tube, and for producing a third reaction reformate.

Figures